

AMENDMENT UNDER 37 C.F.R. § 1.116  
U.S. Application No.: 10/611,946

**REMARKS**

Claims 14-16 and 18-20 are pending in the application. Claims 15, 16 and 19-20 are allowed.

**CLAIM OBJECTION:**

Claim 17 is hereby canceled rendering moot the objection thereof.

**35 U.S.C. §103:**

Claims 14 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Secco et al. (U.S. Patent No. 4,741,592 [hereinafter “Secco”]) in view of Hollander (U.S. Patent No. 5,111,002).

In order to establish a *prima facie* case of obviousness, it must be shown that the prior art teaches or suggests all of the features in the combination as claimed. M.P.E.P. §2142. Secco and Hollander do not teach or suggest each and every feature recited in amended independent claim 14.

In particular, claim 14 is amended to further define that the filler material constitutes a hydrogen absorbent substance. The amendment should not raise a new issue nor require a further search because of its similarities to previously examined claim 17. Applicant takes this opportunity to explain why the features of amended claim 14 are neither taught nor suggested by the art.

Turning to the applied art, Secco relates to hydrogen absorption compositions for optical fiber cables which are obtained by mixing together the filler material and the hydrogen absorbing composition, comprising the catalyst. The Examiner applies Secco for disclosing a “tube with

hydrogen filler material and optical conductors.” (See page 3, lines 1-2 of the Office Action.) However, such a disclosure clearly does not teach or suggest each of the features recited in claim 14. If the Examiner disagrees, he is respectfully requested to point out where each of the specifically claimed operations is found in Secco.

A problem with Secco, as determined by the Applicant, is that the catalyst (i.e., charcoal powder) cannot be uniformly mixed with the filler material (i.e., unsaturated polymer) because of compatibility problems and hence a nonuniform distribution of the catalyst occurs throughout the absorbent hydrogen composition.

The invention of claim 14 addresses this problem by covering a strip of metal over its inside surface with a catalyst substance. The strip of metal is formed in a shape of a tube and the filler material, being a hydrogen absorbing composition, is entered. The present method, in contrast to the teachings of Secco, leads to a uniform distribution of the catalyst on the inside surface of the cable.

As stated in section [0013] of the published application (US 2004/0008440 A1) it has been observed that even though the specific surface area of the catalyst in contact with the hydrogen-absorbent substance is smaller than the corresponding specific surface area when the catalyst is mixed with the filler material (as in Secco) the hydrogen absorbing effect remains satisfactory.

Hollander discloses a method of rolling a strip of metal and welding/gluing it into shape (see Figures 1/2-3 of Hollander) to form a thermocouple. Hollander does teach or suggest an

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optical fiber cable, let alone a hydrogen absorbing composition. Nor does Hollander teach or suggest the desirability of the specific operations recited in claim 14.

If a person skilled in the art combined the teaching of Hollander and Secco, which is unlikely since Hollander relates to thermocouples and Secco relates to optical fibers, she would not arrive with the present method as recited in amended claim 14 since neither Secco nor Hollander describe the unique combination of particular operations including covering a strip of metal over its inside surface with a catalyst substance and inserting a hydrogen absorbing substance as a filler material.

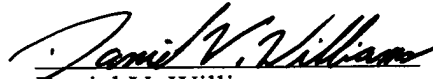
Accordingly, Applicant respectfully submits that claim 14 is patentable over Secco in view of Hollander, such that the rejection thereof should be withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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